In the Specification:

Please amend the paragraph on page 7, lines 9-28, such that it reads as set forth below.

An embodiment of a multi-layer stack with the amorphous film is shown in Figure 1a. A substrate 11, in this example, glass, is coated with a multi-layer optical coating 20. The invention comprises a coating for any substrate 11, such as a transparent substrate like a CRT or glass. The coating is particularly useful for a substrate that undergoes heat treatment, although it is generally useful for coating any substrate. A first anti-reflection layer of dielectric 13, such as titanium oxide, tin oxide, zinc oxide, or silicon nitride, is deposited over the substrate 11. The first anti-reflection layer 13 in combination with subsequent layers reduces the reflectance of visible light. In one embodiment, the first anti reflection layer 13 may be composed of the amorphous film. A first metallic layer 17, such as silver, is deposited over the first anti-reflection layer 13. The first metallic layer 17 reflects infrared light and lowers emissivity. A second anti-reflection layer of dielectric 21, such as titanium oxide, tin oxide, zinc oxide, or silicon nitride, is deposited over the first metallic layer. The second anti-reflection layer 21 de-reflects the metallic layer by reducing the reflectance of visible light. In one embodiment, the second anti-reflection layer 21 may be composed of the amorphous film. At least one of the first anti-reflection layer 13 and the second anti-reflection layer 21 includes the amorphous film. The dielectric layers, such as the second anti-reflection layer 21, in the multi-layer coating may be doped with one or more additives, while other dielectric layers may be undoped. It is understood that other layers may be deposited on top of, on the bottom of, or between the aforementioned layers.

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Please amend the paragraph on page 8, line 23 to page 9, line 15, such that it reads as set forth below.

Another embodiment of a multi-layer stack with the amorphous film is shown in Figure 1d. Fig. 1d illustrates ~~a conventional~~ an anti-reflective coating. A substrate 11, in this example glass, is coated with a multi-layer optical coating 24. The invention comprises a coating for any substrate 11, such as a transparent substrate like a CRT or glass. While the coating is particularly useful when applied to a substrate

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undergoing heat treatment, it may generally be applied to any substrate. A first high-refractive index layer 12 with a refractive index greater than about 2.1 is deposited over the substrate 11. The first high-refractive index layer 12 may comprise the amorphous film. The amorphous film of the present invention can reduce or prevent haze by slowing the migration of contaminants from the substrate 11, such as sodium, from migrating to any upper layers. Amorphous films have low diffusion coefficients because they have no grain boundaries. A first low-refractive index layer 14 with a refractive index less than about 2.1, for example, silicon dioxide or a metallic layer such as silver, is deposited over the first high-refractive index layer 12. A second high-refractive index layer 16 with a refractive index greater than about 2.1 is deposited over the first low-refractive index layer 14. The second high-refractive index layer 16 may comprise the amorphous film. A second low-refractive index layer 18 with a refractive index less than about 2.1, for example, silicon dioxide, is deposited over the second high-refractive index layer 16. At least one of the first high-refractive index layer 12 and the second high-refractive index layer 16 includes the amorphous film. The amorphous film of the present invention reduces or prevents any layer, such as an underlying layer, oxidation at the heat-treatment temperature of the substrate, such as above about 300°C. Since the amorphous film remains substantially amorphous at high temperatures, the optical properties of the stack do not change significantly after heat treatment. It is understood that other layers may be deposited on top of, on the bottom of, or between the aforementioned layers.

A2 end

Please amend the paragraph on page 9, lines 16-25, such that it reads as set forth below.

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The deposition of any of the optical coatings 20, 22, 24, or 26 may occur by sputtering. Figure 2a is a schematic illustration of a ~~conventional~~ sputtering process. A cylindrical rotating target 23 comprises an outer layer composed of a material 25 to be deposited on a substrate 31. A plasma 27 is formed from gas introduced into a vacuum system. Typical gases include oxygen, nitrogen, noble gases, and other gases known in the art. Energized ions 29 in the plasma 27 are accelerated onto a target 23. The ions provide energy for atoms of the material 25 to leave the target 23 and be

A3 end

deposited onto the substrate 31. The sputtering may be performed by a ~~conventional~~ reactive sputtering process, in which the reactive ions combine with the sputtering material either at the target, the substrate, or in the plasma.

Please amend the paragraph on page 9, lines 26-30, such that it reads as set forth below.

A4

The deposition of the amorphous film may be accomplished by using a ~~conventional~~ doped target or by using a ~~conventional~~ co-sputtering process in an oxygen environment. The doped target comprises a metallic material doped with the additive. Co-sputtering, involves the use of two targets, as shown in Fig. 2b, one coated with the metallic material 35 and the other with the additive 33.